

A NEW BAMBOO AND A NEW RECORD FOR GUATEMALA

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During the course of the preparation of a systematic treatment of the native and introduced bamboos of Guatemala, as a part of the section on Gramineae by Dr. Jason R. Swallen, in Steyermark and Standley's Flora of Guatemala, two indigenous species were found to require special attention. One of these apparently is new to science; the occurrence of the other in Guatemala is recorded here for the first time. A new combination is made.

ARTHROSTYLIDIUM BARTLETTII McClure, sp. nov.

Culmorum internodia (superiora tantum visa) usque ad 290 x 3 mm., glabra, pariete tenuia, nodis vis inflatis. Culmorum vaginae deciduae, in typo desideratae. Rami tenues crebri, subaequales, usque ad 35 cm. longi, folias floresque vel flores tantum gerentes. Foliorum vagina internodiis brevior, apicem versus carinata et sulcata, prope margines ciliatos puberula, alibi glabra; auriculae non evolutae; setae orales, quum evolutae, paucae, debiles, glabrae. Ligula exterior ad lineam reducta, margine integra; ligula interior infra 1 mm. longa apice pleraque convexa, margine ciliolata. Petiolus brevissimus (2-3 mm.) tenuis, fragilis, supra scaber, subtus glabrus vel subglabrus. Foliorum lamina 20 x 2 mm. usque ad 120 x 9 mm., pleraque plicatulata, lanceolata vel oblongo-lanceolata, apice acuta, basi rotundata, subtus ad basin a latere hirsuta, alibi glabra vel asperula, costa et nervis secundariis utrinque omnino vix manifestis.

Inflorescentiae subspicatae racemosae, ramos plerosque foliiferos terminantes, 5-16 cm. exsertae, axi glabrae. Spiculae compressiusculae, maturitate disarticulantes, 15-20 mm. longae, subsessiles, sese ca. 10 mm. distantibus, pedicellis ca. 1 mm. longis pedicellatae. Glumae vacuae 2-3, glabrae, carinatae, apice scabro acutae et mucronatae vel brevissime aristulatae. Flosculae 2-4, paullum divergentes, infima interdum imperfecta, suprema sempre ad rudimentum reducta. Lemma pallide stramineum, 5-9-nervis, apice acuto scabro mucronatum, prope margines ciliatos puberulum, alibi glabrum; I: ca. 6 mm. longo, quandoque vacuo, II et III: 8-10 mm. longis. Palea pleraque 1-3 mm. exserta, vix tincta, apice et carinis ciliata, alibi glabra. Lodicae 3, conformes, ca. 1 mm. longae, hyalinae, lanceolatae, acutae, apice parce ciliolatae. Antherae ca. 5 mm. longae viridiluteae. Ovarium angustum subfusiforme, glabrum, ca. 1.5 mm. longum. Stylus albus supra in stigmata 2 plumosis divisus. Fructus maturus adhuc non inventus.

Videtur *Arthrostylidium racemiflorum* Steud. proxime accedere, tamen species nostra differt imprimis foliorum laminis amplioribus, supra asperis subtus glabris vel subglabris, axi inflorescentiarum longiore glabroque, spiculis compressis longioribus et crassioribus, lemnata subglabris, mucronatis vel aristatis.

Type, in three sheets, U. S. National Herbarium Nos. 1503623, -4, -5, collected in jungle, near a dry arroyo at Uxactum, Dept. of Petén, Mar. 20, 1931, by H. H. Bartlett (No. 12154). U. S. National Herbarium No. 1614919, collected June 18, 1934, at La Libertad and vicinity, in the same Department, by Mercedes Aguilar H. (No. 304) appears to be conspecific, but no complete spikelets are available. A sterile specimen, U. S. National Herbarium No. 1610397, collected at Hiltun, Petén, June 4, 1933, by C. L. Lundell (No. 3591) probably is the same species. It agrees generally with the type in vegetative characters, except that the culm internode present is striped below the node with short, dark, retrorsely inclined hairs closely packed in narrow, close-set rows. The leaf blades are larger than those in the type, but this is to be expected in sterile material.

It is unfortunate that the available specimens and field notes leave so many aspects of the new species unrepresented.

GUADUA SPINOSA (Swallen) McClure, comb. nov.

Arthrostylidium spinosum Swallen, Journ. Washington Acad. Sci. 28:6. 1938.

This species was originally placed in the genus Arthrostylidium on the strength of the number of stamens (3), and the scarcely winged keels of the palea. However, the indeterminate inflorescence and certain vegetative characters, especially the habit and thorniness of the branches of the culm, are not at all those of Arthrostylidium, while they are all quite characteristic of the genus Guadua. The number of stamens is known to vary in other genera of bamboos (e.g., Melocanna, Ochlandra and Pseudosasa) without correlated variations in other generic characters. It seems expedient, therefore, to transfer this species to the genus Guadua, where apparently its only really exceptional character will be the reduced number of stamens.

Originally described from material collected by Lundell in British Honduras, this bamboo was found by the writer (McClure No. 21676, collected July 5, 1948) in a vegetative condition at Boca Ancha, at the eastern end of Lake Izabal, Department of Izabal, Guatemala. The species frequents river bottoms and low-lying flood plains, and apparently tolerates somewhat prolonged flooding. Dr. Barnum Brown, of the American Museum of Natural History (in a letter to the writer) says that this bamboo is common along rivers in the Petén, where it is known as "Jimba." The occurrence of this species in Guatemala apparently has not hitherto been reported.